Week 8 Phenomenology and Grounded Theory

Phenomenology "The lived Experience"

- The term phenomenology comes from Greek Phainomenon (appearance, manifestation) and logos (the science of).
- Phenomenology refers to reasoned inquiry into the nature of appearances.

• Phenomenology can be defined as an approach to research that seeks to describe the **essence** of a phenomenon by exploring it from the perspective of those who have experienced it

• Edmund Husserl (1859-1938), the German Mathematician, is the founder of the phenomenological movement (the father of phenomenology).

- Moustakas is a major name in phenomenology today.
- Phenomenology concerns/ helps researchers to **apprehend lived experience** within a specific group (for example: experience of illness, such as clinically inflicted pain).
- Interested in the everyday way in which people make sense of their "being" in the world.
- Each person has a unique view of the world, and a particular social reality which is as true as anybody else's reality.
- The type of problem best suited for phenomenology is one in which it is important to understand several individuals' common or shared experiences of a phenomenon.

•At the core of phenomenology lies the attempt to describe and understand phenomena as experienced by individuals who have lived through them.

Goal of Phenomenology

• To describe the meaning of experience—both in terms of What was experienced? and How it was experienced?

- By examining an experience as it is subjectively lived, new meanings and appreciations can be developed to inform, or even re-orient, how we understand that experience.
- The goal is to produce a brief statement that succinctly evokes the phenomenon
- Phenomenology (another definition)

•According to Creswell (2007), a phenomenological study describes the meaning for several individuals of their lived experiences of a concept or a phenomenon.

•Phenomenology is the search for the **"essence of things"** that cannot be revealed by ordinary observation (Sanders, 1982; Moustakas, 1994).

Meaning of essence

•An essence could be understood as a structure of essential meanings that explicates a phenomenon of interest.

•The essence or structure is what makes the phenomenon to be that very phenomenon.

- Phenomenologists assume that human experience is inherently subjective
- Within these subjective experiences are essential structures that characterize the experience
- The way to gain access to these structures is through description of experiences

Research Questions	For example:				
	 What is the essence of being a mother? 				
 What is the essential meaning of an experience? 	 What is the essential structure of a caring nurse-client interaction ? 				
What does this experience mean?	What is it like to be bored?				
• How does the lived world present itself to the participant or to me as the researcher?	 What is it like to experience a heart transplant? What is it like to experience empathy? What is it like to experience pain? 				
Role of Researcher					
 Researcher's own experiences with a phenomenon are inclustudy. Since the essence is universal, meaning must be true for reseparticipants 	uded as a part of the Participant 1 Searcher as well as				
Fields often use phenomenology					
Social sciences Health sciences Psycho	ology • Nursing • Education				
• Phenomenology is well-suited to studying research question experience.	ns involving affective, emotional, and often intense humar				
Two very different branches					
1. Descriptive (Transcendental) phenomenology: Focus less on	n researchers interpretation and more on				
describing experiences of participants.					
2. Interpretive (Hermeneutical) phenomenology : Reflecting researcher.	g on lived experiences with interpretation by the				

Descriptive Phenomenology

• The goal of the researcher is to achieve Transcendental Subjectivity.

• Transcendental subjectivity means that the impact of the researcher on the inquiry is constantly assessed and biases and preconceptions neutralized, so that they do not influence the object of study.

• The process is transcendental because the researcher sees the phenomenon newly, as for the first time. More simply: It is an attempt to approach a lived experience with a sense of "newness" to elicit rich and descriptive data.

• The researcher is to stand apart, and not allow his/her subjectivity to inform the descriptions offered by the participants.

• The concept of bracketing: Researchers setting aside their pre-understanding and acting non-judgementally (Epoche)

Bracketing

• A methodological device of phenomenological inquiry that requires deliberate putting aside one's own belief about the phenomenon under investigation or what one already knows about the subject prior to and throughout the phenomenological investigation to better examine the consciousness itself.

- For instance, a study could be designed to have multiple researchers triangulate their reductions (researchers triangulation) to confirm appropriate bracketing was maintained.

- Alternatively, a study could involve validation of data via member checking (participant validation) to ensure that the identified essences resonated with the participants' experiences

Interpretive (hermeneutic) Phenomenology

• The word hermeneutic is derived from the name Hermes, a Greek god who was responsible for making clear, or interpreting, messages between gods (Thompson, 1990).

• In interpretive phenomenological approach, it is acknowledged that pre-understanding cannot be eliminated or "bracketed".

• Researchers can interpret a phenomenon only through their own experiences. The present can be understood only through the past, and the past can be understood only through the present.

• Another term, being-in-the-world, was used by Heidegger to emphasize that humans cannot abstract themselves from the world. Therefore, it is not the pure content of human subjectivity that is the focus of a hermeneutic inquiry but, rather, what the individual's narratives imply about what he or she experiences every day.



Phenomenology Example

• Ouelette, Achille & Paquet, 2009 (Article title: The Experience of Kidney Graft Failure: Patients' Perspectives).

• "How do patients experience kidney graft failure" – Develop a comprehensive description of the way individuals constructed meaning out of this experience.

• Analysis of data identified five themes which the authors then compared to an existing theoretical framework about psychosocial transition

Design characteristicsin Phenomenology	saturation.
	-The individuals must have experienced the phenomenon.
	- The more diverse the people, the harder it is to find common experiences.
	- Data collection is by interview of the groups or individual that are verbatim, taped, and field notes.
	- Data collection is directly tied to analysis, that eventually is coded or structured into themes.

The Procedures of Phenomenological Inquiry

- Determine if phenomenological approach is best
- Do several people share a common experience?
- Can you develop policies, practices or develop deeper understanding of the features of the phenomenon?
- 2. Define the phenomenon of interest to be studied

• 3. Recognize and understand the philosophy behind phenomenology including bracketing, objective reality and individual experience.

• 4. Collect data through multiple in-depth interviews or other forms of collection

• 5. Begin with the broad "What" and "How" questions. Proceed with broader open-ended questions to gather textural and structural data(Creswell 2010)



- Phenomenological interview must contain three main domains:
- 1. contextualization (natural attitude and lifeworld).
- 2. apprehending the phenomenon (modes of appearing, natural attitude).

3. clarifying the phenomenon (imaginative variation and meaning).

Phenomenological Attitude	Researcher Approach	Interview Structure	Method	Example Question
(Acceptance of Natural Attitude of Participants	Contextualization (Eliciting the Lifeworld in Natural Attitude)	Descriptive/Narrative Context Questions	"Tell me about becoming ill," or "Tell me how you came to be at the satellite unit."
Phenomenological Reduction (Epoché)	Reflexive Critical Dialogue With Self	Apprehending the Phenomenon (Modes of Appearing in Natural Attitude)	Descriptive and Structural Questions of Modes of Appearing	"Tell me about your typical day at the satellite unit,"or "Tell me what you do to get ready for dialysis."
l	Active Listening	Clarifying the Phenomenon (Meaning Through Imaginative Variation)	Imaginative Variation: Varying of Structure Questions	"Describe how the unit experience would change if a doctor was present at all times."

Data Analysis in Phenomenology

• Horizontalization

- Laying out all the data to examine it as equals.
- Highlight significant statements that provide understanding of participants' experiences.
- Organise the data into clusters and themes.
- Phenomenological Reduction
- Process of continually returning to the essence of the experience to derive inner meaning.

Strengths of Phenomenology

*Help to give a better understanding of the real-life situation and experiences

*Good at surfacing deep issues and making voices heard, helps individuals to connect to the phenomenon and possibly group.

*Has the ability to query and probe in-depth issue of a phenomenon

*Findings are allowed to emerge rather than being imposed by investigator

Challenges of Phenomenology

• Bracketing personal experiences may be difficult for the researcher to implement (the researcher to become separated from the text).

• The participants in the study need to be carefully chosen to be individuals who have all experienced the phenomenon in question.

<u>Conclusion</u>

• The product of a phenomenological study is a "composite description that presents the 'essence' of the phenomenon, called the essential, invariant structure (or essence)" (Cresswell, 2007, p. 62, emphasis in original).

• This description represents the structure of the experience being studied.

"The reader should come away from the phenomenology with the feeling, 'I understand better what it is like for someone to experience that ' (Polkinghorn, 1989, p. 46)" (Cresswell, 2007, p. 62).

Example

How can tomorrow's doctors be more caring? Phenomenological INVISTGATION

Questions

1. What is phenomenology? 2. What are the two types of phenomenology?

3. What is the research tool that is mainly used in phenomenology?

4. What is the meaning of the term "Horizontalization"?

Grounded Theory (GT)

• Barney G. Glaser and Anselm L. Strauss, are the creators of Grounded Theory (GT) method in their book '**The Discovery of the Grounded Theory**: Strategies for Qualitative Research ' in late 1960s.

• In their book, the term GT is used in a more sense to denote theoretical constructs derived from qualitative analysis of data.

• Grounded Theory is often used to describe research that does not start from some prior theoretical understanding of what is going on (process), but works inductively, or from the **ground up to build a theory of what is going on** (Dew, 2007).

• GT is a systematic (uses systematic set of procedures) qualitative research methodology in which the inquirer generates a general explanation (a theory) of a process("What is going on here"), action, or interaction grounded in the views of participants in the study about a topic (Creswell & Poth, 2007).

Definitions

• Glaser and Holton: 'a set of integrated conceptual hypotheses systematically generated to produce an inductive theory about a substantive area' (p. 43).

• Strauss and Corbin: 'theory that was derived from data, systematically gathered and analysed through the research

process' (p. 12).

• Charmaz: 'a method of conducting qualitative research that focuses on creating conceptual frameworks or theories through building inductive analysis from the data' (p. 187).

• Birks and Mills: 'process by which theory is generated from the analysis of data'.

Grounded Theory

• The overarching goal of grounded theory is to develop theory. Therefore, grounded theory studies may be carried out related to research phenomena or objects, which lack a (sufficient) theoretical foundation.

• A key idea is that this theory-development does not come "off the shelf," but rather is generated or "grounded" in data from participants who have experienced the process (developed theories are "grounded" in the collected data (see limitations: GT avoids literature review).

• It may be, that no theory exists for the phenomena under study or that the existing theories are insufficient in that

o they lack important concepts;

o the relationships among the concepts are not elaborated enough;

o the relevance of the concepts and their relationships has not been corroborated for the population or the context under study. • Grounded theorists not only code data for concepts (e.g., older adults recognize the importance of preventative approaches to health, most commonly mentioned being the winter flu vaccine) but also identify relationships between concepts/categories (i.e., variables) to build substantive theory (e.g., social class features as the strongest explanation of the likelihood of seeking flu vaccination in the sample)(Foley & Timonen, 2015).

Grounded Theory

• GT is a research method that operates almost in *a reverse fashion* from traditional research and at first may appear to



be in contradiction to the scientific method.

• some researchers refer to the theory generated using this method as the "reverse-engineered" hypothesis.

Grounded Theory Design- The systematic Design

Open Coding: properties and dimensionalized properties.

Axial Coding: researcher selects one open coding category and places it at the center as the Central Phenomenon and then relates all other categories to it.

Selective Coding: writing a theory based on the interrelationship of the categories from axial coding

Categories have properties = multiple perspectives of the category

- And are dimentionalized
- O properties presented on a continuum
- Like colour has
- O Properties hue, tone, shade, intensity
- O Dimensions dark, light etc. are dimensions of shade.
- E.g. watching has frequency, duration, extent, intensity.
- information passing has amount of info., manner of passing etc.

Coding in Grounded Theory Source (Cho & Lee, 2014)



Definition of coding

- Coding = Process in which data are fractured, conceptualized and reordered in a new way
- Process in which « codes » are given to parts of sentences, whole sentences, paragraphs etc

Coding- quantitative/qualitative

• The main categorizing strategy in qualitative research is coding.

• "This is quite different from coding <u>in quantitative research</u>, which consists of applying a preestablished set of categories to the data according to explicit, unambiguous rules, with the primary goal being to generate frequency counts of the items in each category."

• • In <u>qualitative research</u>, the goal of coding is not to count things, but to "fracture" (Strauss 1987, p. 29) the data and rearrange them into categories that facilitate comparison between things in the same category and that aid in the development of theoretical concepts." (Emphasis JS) Maxwell, Joseph A., Qualitative research design..., 2005, 96

How to give a code : ask and answer questions

- Of what general category is this item of data an instance?
- What is this item of data about?
- What question about a topic does this item of data suggest?
- What sort of answer to a question about a topic does this item of data imply?
- What is happening here?
- What do people say they are doing?

- What are people doing?
- What kind of event is going on?

What does this item of data represent?

Of what topic is this item of data an instance?

Bryman, Alan, Social research methods, 2004, S. 408

Open coding defined

• Open coding refers to the initial phase of the coding process in the grounded theory approach to qualitative research (generating theory from data).

- The process of open coding begins with the collection of raw data (e.g., interviews, fieldnotes, art, reports, diaries).
- The intent of open coding is to break down the data into segments in order to interpret them.
- Detailed word-by-word and line-by-line analysis is conducted by researchers asking what is going on.
- The researcher discovers, names, defines, and develops as many ideas and concepts.

Open coding example-1

Interview with a woman in a study of arthritis sufferers. Taken from Strauss and Corbin (1990) Basics

of Qualitative Research (1st ed.) p. 78.



Pain relief is a major problem when you have arthritis. Sometimes, the pain is worse than other times, but when it gets really bad, whew! It hurts so bad, you don't want to get out of bed. You don't feel like doing anything. Any relief you get from drugs that you take is only temporary or partial.

Marc: My conversion, that's a long, a very long story. Well, I come from a church, from the family perhaps, from catholicism My parents are catholic uh, I was just a bit, I was growing up in the catholic church when I was a child, I did the catechism, I have done first communion, I've been baptised I have even been married in the catholic church. Ah, but just after my marriage, uh, uh, our couple did not go too well we were	Marc: My conversion, that's a long, a very long story. Well, I come from a church, from the family perhaps, from catholicism My parente are catholic ub, uwas just a bir I	Marc: My conversion, that's a long, a very long story. Well, I come from a church. from the family perhaps, from catholicism My parents are catholic uh, I was just a bit. I	Process longitherr of conversion Religion before annversion Catholic socialization
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Open coding example-2	already on the verge of divorcing so, me and my wife, we did not get along well and the situation got worse and worse, we were both unhappy, I was unhappy and my wife too, And, uh. I have to say that this is also a problem that did not come about just because of the marriage; I have had to put up with this all of my life.	my wife, we did not get along well and the situation got worse and worse, we were both unhappy. I was unhappy and my wife too, And, uh, I have to say that this is also a problem that did not come about just because of the marriage; I have had to put up with this all of my life.	Profound problems Durnison of problems short / long

Axial coding Defined

• Axial coding is a stage in grounded theory analysis after open coding, where the researcher seeks to make links and find relationships between the concepts and categories derived from open coding.

• Strauss and Corbin (1990): 'The next step (axial coding) is the process of determining hypotheses about the relationships between a category and its subcategories, for example, conditions, context, action/interaction strategies and consequences' (p. 467).

• 'As our goal was not to create a whole new theory, we only used open and axial coding to identify the main categories and to make connections between categories, hereby identifying causal conditions, context, strategies and intervening conditions (Strauss and Corbin, 1990)' (p. 34).

• Rather than look for any and all kind of relations, grounded theorists emphasize causal relationships, and fit things into a basic frame of generic relationships.

• Aims to integrate codes around the axes of central categories'; the essence of axial coding is the interconnectedness of categories. Hence codes are explored, their interrelationships are examined, and codes and categories are compared.

• The word 'axial' used by Strauss and Corbin (1998) is intended to put an axis through data. This axis connects

identified categories in open coding. Axial coding puts categories back together in order to explore theoretical

possibilities.

Axial coding process

- Data has been entirely coded
- Objective of Axial Coding involves model development

• Look for:

• Causal conditions: what influences the central phenomenon, events, incidences, happening

- Strategies: How do actors address the phenomenon?
- Context: When, where, with whom?
- Intervening conditions: What factors constrain strategies?
- Actions How are strategies enacted?
- Consequences What are the consequences?
- Put the model together
- o Exploring relations among categories, and making connections between them (i.e., Cause and Effect)
- o Specifying the moderating conditions, and intervening states that may play a role in shaping outcomes.
- Specify model discursively:

When I have (condition) arthritic pain (phenomenon), I take aspirin (strategy). After a while, I feel better (consequence).

• Look for confirmation in the data & look for possible exceptions.

o Exceptions don't refute model but may suggest additional moderators.

Model in axial coding

Model== Causal conditions => Central Phenomenon => context => intervening conditions => Action/ interaction

strategies => Consequences.

Axial Coding: The Resulting Paradigm Model (Strauss & Corbin)

	Model	Description	How to identify	Example
	component			
Α	Causal condition	events or incidents that lead to the occurrence of a phenomenon	Point out by: when, while, since, because, due to, on account of.	breaking a leg
в	Phenomenon	central idea	Ask: what is this data referring to?	pain
С	Context	Set of properties and that pertain to a phenomenon and conditions within the strategies are taken	Under the specific condition	Located in, of high intensity
D	Intervening conditions	Broad and general condition bearing upon strategies	Time, space, culture, economic and technological status, career, history and individual biography.	Person age, other illnesses, past history with pain
Е	Action / Interaction strategies	Respond, handle, carry out a phenomenon	Action oriented verbs or participles	Keep warm, go for emergency help
F	Consequences	Outcomes to a phenomenon	Events or happenings, actual or potential.	Pain relief

Axial coding example

Morrow, S. & Smith, M. (1995). "A grounded theory study: Constructions of survival and coping by women who have survived childhood sexual abuse". In John Cresswell (Ed.), Qualitative inquiry and research design: Choosing among five traditions (pp. 297-321). Thousand Oaks, CA: Sage.



- Core category
- o Accounts for most of variation
- o Most other categories relate to it
- Systematically relating the core category to other categories and filling in categories that need further

refinement.

Theoretical sampling

- Data analysis and data collection proceed together.
- Data analysis begins to develop theories (explanations) that suggest further cases to sample.

Use these to elaborate and refine emerging theoretical categories

Develop properties till no new ones emerge.

Unique features of Grounded Theory

1. Simultaneous involvement in data collection and analysis phases of research.

- Researcher's emerging analysis shapes his or her data collection procedures.

- Insights emerging from early data shape further data collection, which in turn adds to existing understanding, and so on until 'saturation' occurs.

- Example: using the data analysis of the first interviews to modify the interview format in order to explore certain concepts in more depth (Burck, 2005).

2. Creation of analytic codes and categories developed from data, not from preconceived hypotheses.

3. Memo-making

- Memos are informal analytic notes about the data and the theoretical connections between categories (Glaser & Holton, 2004).

4. Theoretical sampling

- Theoretical sampling means that starting by interviewing a small number (sometimes just one or two) people whose characteristics are relevant to the study, and selecting further participants on the basis of the information gathered from the early interviews (Foley & Timonen, 2015).

- Example: in a study of maternity care services use among immigrants of African origin, starting with participants who fit this broad selection criteria before starting to purposively select some who are Muslim, others who are Christian, because early interviews suggested the importance of religion in inclination to access services.

- Sampling ceases in GT studies when categories are well described and dimensionalized. This is known as

"saturation" of the data. Saturation is not dependent on the amount of data that has been collected and analysed,

but rather occurs when no significant new insights are emerging (i.e., additional interviews are not generating

novel data/data necessary for fleshing out the categories that have already emerged) (Foley & Timonen, 2015).

5. Employment of Constant Comparative Method (CCM).

- theory emerges while constantly comparing data from different categories (Creswell & Poth, 2007).
- If a label appears repeatedly then the researcher can be satisfied with its existence.
- 6. Delay of the literature review

- GT supports initial data collection and preliminary analyses before attempting to incorporate previous research literature.

- Pre-existing knowledge about the topic is deliberately withheld until initial data collection and analysis are complete, in order to prevent it from influencing the research findings.

- As such, GT focuses on Emergence, that is, a research should start from a position where the researcher knows nothing about what they are studying, so that all concepts truly emerge from the data (Hancock, Ockleford, & Windridge, 2009).

Challenges of Grounded Theory

• Truly inductive analysis is not possible and is always limited by the unconscious application of prior knowledge to the thematic analysis process- either from the researcher's own experience or from their reading of the literature.

• The researcher faces the difficulty of determining when categories are saturated or when the theory is sufficiently detailed.

- The use of discriminant sampling- The final phase in Grounded Theory.

- Researchers gathered additional information from individuals similar to those people initially interviewed to determine

if the theory holds true for these additional participants.

• Studies are often limited by the available time or funding, and where smaller numbers of interviews are analysed there is a danger that the results may be incomplete and that the effect of bias may be greater.

<u>GT Example</u>

- Hall, Tomkinson & Klein, 2012
- "How do care providers and women manage birth?"

- Focus groups of women + health care providers (family docs, midwives, nurses, obstetricians, doulas)

• Generated a theory about how women and providers used different strategies to minimize risk and maximize integrity, including: accepting or resisting recommendations for surveillance and intervention; plotting courses v. letting events unfold.

Questions

- 1. What is the purpose of grounded Theory?
- 2. What are the types of coding in Grounded Theory?
- 3. Give one advantage of GT?
- 4. What is the meaning of theoretical sampling?

WEEK 9 Narrative Research and Ethical Considerations in Qualitative Research

Narrative research- Introduction

• Narrative inquiry was first used by Connelly and Clandinin as a methodology to describe the personal stories of teachers (Connelly & Clandinin, 1990).

• Conducted through dialogue between the researcher and the participant.

• Defining features of the narrative approach include the collection of narrative (stories) from individuals or small groups. Most often there is collaboration with the researcher as storytelling engages the audience.

• These stories tell of individual experiences that often exposes the researcher to the identities of that individual.

• Narratives are often collected through interviews but other qualitative forms of data collection, such as observations and documents may be used.

• A narrative (story) is an account with a beginning, a sequence of unfolding events and an ending (Greenhalgh & Hurwitz, 1999).

• It puts characters, events, actions and context together so as to make sense of them, and it generally follows a recognizable form and pattern (e.g. clinical case).

• "Narrative" might be the term assigned to any text or discourse, or, it might be text used within the context of a mode of inquiry in qualitative research.

• A methodology which consists of **gathering stories** about a certain theme where the researcher will find out information about a specific phenomenon (Paiva, 2008).

It is a compassionate methodology.

• The inclusion of social, cultural and environmental influences on illness understandings makes narrative inquiry very suitable for research in health as it incorporates all dimensions that impact the individual's health experience.

Goal of Narrative Enquiry

•To reveal (uncover) the meanings of the individuals' experiences as opposed to objective, decontextualized

truths (Bailey & Tilley, 2002).

• Narrative researchers look for ways to understand and then present real-life experiences through the stories of

the research participants (Clandinin & Connelly, 2000).

Narrative research

- Reasons for its popularity
 - The increased emphasis on teacher reflection.

The increased emphasis placed on teacher knowledge, professional development, and decision-making.

As Clandinin (2006) states:

Perhaps in listening and attending to teachers' stories ... we can create conditions that allow us to give them back their stories and perhaps help them see the social, cultural, and institutional stories they work within and that shape them. As [teachers] begin to awaken to other stories of community, we might see [them] begin to re-story [their] stories to live by. Perhaps we can begin to work together to change those social, cultural and institutional narratives. (p.52)

Benefits of Narrative inquiry

• By using the narratives format to present findings, researchers can access rich layers of information that provide a more in-depth understanding of the particulars of the participants' points of view (Wang & Geale, 2015).

• The knowledge gained can offer the reader a deeper understanding of the subject material and extra insight to apply the stories to their own context (Wang & Geale, 2015).

Narrative research- Data collection

• The procedures for implementing this research consist of focusing on studying one or two individuals, gathering data through the collection of their stories, reporting individual experiences, and chronologically ordering (or using life course stages) the meaning of those experiences.

• In order to collect the data, several techniques can be used: interviews, journals, autobiographies, oral history, and field notes (Paiva, 2008).

Oral History

- A method for collecting data from participants by asking them to share their experiences.
- Two ways to develop oral histories
 - Interviews using structured or unstructured protocols
 - Annals and chronicles
 - The participant constructs a timeline and divides it into segments of significant events or memories.

Analysis of narratives OR Narratives analysis

• Analysis of narratives

• The process whereby the researcher collects stories as data and analyses them into a set of themes that hold across all of the stories

- The themes are the outcomes
- Narrative analysis

• The kind of narrative that is constructed by the researcher who has collected descriptions of events through interviews and observations and synthesized them into stories or narratives.

- The story is the outcome
- This process is called Emplotment.

• It includes amalgamation of multiple interviews/conversations into one narrative that encompasses the events discussed, presented in a sequence that creates a narrative plot (Tropea, 2012).

Key Features of Narrative Research

- Concentrates on individual experiences
- Reports a chronology of the experiences
 - use a time sequence of events
- Gathers the individual stories told to the researcher or collected through field texts
 - autobiographies
 - interviews
 - journals

• Describes the context or setting for the individual stories

- Includes the people involved in the story.
- Includes the physical setting
- Setting may be described before events or actions, or can be woven throughout the study

• Collaborates throughout the process of research with the individuals whose stories are being reported.

• Participants are actively involved in the inquiry as it unfolds.

• Relationships between research and participant are negotiated to minimize the potential gap between narrative told and narrative reported

• Temporality (time): Past, present and future (When)

• Past experiences will have an influence on how a patient experiences their present situation and previous encounters in healthcare influence how they perceive their future

• Sociality: The personal, social and cultural (Who and Why)

• A person's narrative will be influenced by the audience, be it a researcher, a family member or a stranger, they will undoubtedly influence how the narrative is told and what the person is willing to include in their narrative.

• Spatiality (space, environment) (Where)

• The environment will also influence how an event is experienced by the person involved (Connelly & Clandinin, 1990)

Example on the integration of Temporality, sociality, and spatiality

• Living with a chronic illness or surviving an acute illness can be a life-changing experience and these narratives of illness are descriptions of an individual's experience of their situation, reflected by surroundings, such as hospitals, previous illness and life experience. Hence a person's narratives provide a deep detailed view of their illness experience and inform how we can best provide future care.

Questions of trustworthiness (has subject told the "truth")

- Prolonged engagement and persistent observation enhances the quality of the narrative.
- Triangulation using multiple data sources.
- Member checking asking participant if interpretation is accurate and making adjustments in the data and interpretation if necessary.
- Thick description (thorough description of study's contextual factors, participants, and experiences).
- Helps in contextualising the data.

Strengths

- Stories are sense-making devices.
- Stories are inherently nonlinear.
- Stories are often evocative and memorable.
- Stories are necessarily perspectival (i.e. conveying a particular perspective).(Greenhalgh, 2016)

Limitations

•The institutional contexts in which research is undertaken may constrain and distort the stories told.

•Some narratives simply cannot be told, perhaps because the individual has lost the ability to narrate.

Challenges

• The researcher needs to collect extensive information about the participant, and needs to have a clear understanding of the context of the individual's life.

• Active collaboration with the participant is necessary, and researchers need to discuss the participant's stories as well as be reflective about their own personal and political background.

Steps for performing narrative research

- Identify a phenomenon to explore.
- Purposefully select an individual to learn about the phenomenon.
- Collect the story from the individual.
- Restory or retell the individual's story.
- Collaborate with the participant storyteller.
- Write a story about the participant's experiences.
- Validate the accuracy of the report.

Final product

The amalgamated narrative contains the temporal dimension (experiences from the past and visions for the future), sociality (how the narrative is presented in the cultural and social environment), and spatiality (a description of surroundings, sometimes both where the narrative was experienced and where the narrative is told).

Ethics in research (Introduction)

• The introduction of the World Medical Association's Declaration of Helsinki in 1964 stressed the importance of establishing Research Ethics Committees or institutional review boards.

• According to the Declaration of Helsinki:

Studies should be designed in the safest manner.

Every medical research study involving human subjects should be preceded by careful assessment of predictable risks and burdens

Informants in research should be recruited on a voluntary basis and should be informed of the research study in order to freely give informed consent, preferably by filling in a written consent form.

The informants must provide entirely voluntary agreement to participate—that is, without physical or psychological coercion.

Ethical Principles in Research

- Researchers are responsible for ensuring participants
- Are well-informed about the purpose of the research they are being asked to participate in.
- Understand the risks they may face as a result of being part of the research
- Understand the benefits that might occur to them as a result of participating

Informed consent

 Informed consent stresses the researcher's responsibility to completely inform participants of different aspects of the research in comprehensible language.

- The nature of the study
- the participants' potential role
- the identity of the researcher
- the financing body
- the objective of the research
- how the results will be published and used.
- Any potential risks and benefits of the research

Ethical problems

• Issues that may rise when a researcher gains access to a community and the effect the researcher may have on the participants.

• Ethical problems could occur to both researcher and participants.

- Ethical unsoundness or physical and emotional risks to the researcher can arise if the researcher
- (a) faces aggression from the participant.

(b) undertakes fieldwork at premises unfamiliar to the researcher.

• The need acknowledge that participants can withdraw from a study at any time.

Four domains for Ethics

- Procedural ethics
 App
 - Approval processes.

Situational ethics

- Research context
- Ethical relationships Dynamics between the researcher and participants.
- Ethical issues in exiting the study Completion and disseminating findings

(Tracy, 2010)

Procedural Ethics

• Procedural—also known as categorical—ethics refer to ethical actions dictated as universally necessary by larger organizations, institutions or governing bodies.

1. Encompassed by the Institutional Review Board (IRB), including mandates such as do no harm, avoid deception, negotiate informed consent, and ensure privacy and confidentiality.

2. Procedural ethics also suggest that research participants have a right to know the nature and potential consequences of the research—and understand that their participation is voluntary.

• As a method of procedural ethics, researchers safeguard participants from undue exposure by securing all personal data—in a locked office or drawer, or a password-protected website.

Situational Ethics

• Situational ethics refer to ethical practices that emerge from a reasoned consideration of a context's specific circumstances.

- deals with "the unpredictable, often subtle, yet ethically important moments that come up in the field".
- These responsibilities go beyond review boards and beyond edicts like "the greater good" and "do no harm."
- A situational ethic assumes that each circumstance is different and that researchers must repeatedly reflect on, critique, and question their ethical decisions.

• Situational ethics often revolve around the question are the harms of the research practices outweighed by its moral goals?

• this approach suggests that ethical decisions should be based on the particularities of a scene.

Ethical Relationships

• Relational ethics are related to an ethic of care that "recognizes and values mutual respect, dignity, and connectedness between researcher and researched, and between researchers and the communities in which they live and work".

• the researcher as human instrument should always respect others, which includes allowing participants to assist in defining the rules of the research and helping the researcher to practically understand the ramifications for violating traditional ways of doing things.

Exiting ethics

• Ethical considerations continue beyond the data collection phase to how researchers leave the scene and share the results.

• Certainly, researchers never have full control over how their work will read, be understood, and used.

• However, they can consider how best to present the research so as to avoid unjust or unintended consequences.

Ethical Challenges in Qualitative research

• The researcher-participant relationship

• The desire to participate in a research study depends upon a participant's willingness to share his or her experience.

• Researchers who develop close relationships with participants and share personal information must treat carefully and acknowledge the ethical risks associated with this behaviour, such as harming participants at the end of the research relationship and the potential for participants to feel misunderstood, or 'used'.

• Anonymity, confidentiality and informed consent.

• Confidentiality means that no personal information is to be revealed except in certain situations.

This is especially necessary when working with sensitive information that may reflect a study participant's

personal views and experiences.

Participant and institutional confidentiality.

Ethical Challenges in Qualitative research

• Data gathering

Example: Ethnography

 \checkmark Long presence of the researcher amongst people of a particular culture requires informed

consent.

 \checkmark Participants should always be aware of the information that has been obtained and is being recorded, and consent to it.

 \checkmark Sometimes this cannot be achieved easily and conflicts may happen.

 \checkmark Emergent data collection (Research Ethics committee must expect amendments to research protocol).

Researcher subjective interpretation of the data

- It is likely that participants views may be misinterpreted or taken out of context.
- Member checking must be addressed in the informed consent.

WEEK 10 Sampling in Qualitative Research

Introduction

>> A sampling plan is the design for how to specifically choose sources for your data.

>> A sampling plan is a formal plan specifying a sampling method, a sample size, and procedure for recruiting

participants.

o Recruitment refers to the process whereby the researcher identifies and invites (recruits) participants to join the study.

>> A qualitative sampling plan describes how many observations, interviews, focus group discussions or cases are

needed to ensure that the findings will contribute rich data.

>> In quantitative studies, the sampling plan, including sample size, is determined in detail in beforehand but qualitative research projects start with a broadly defined sampling plan.

>> The sampling plan in qualitative research is appropriate when the selected participants and settings are sufficient to provide the information needed for a full understanding of the phenomenon under study.

>> Good qualitative researchers, at the very least, engage in purposeful sampling, which means that they purposefully choose data that fit the parameters of the project's research questions and goals.

>> While quantitative studies often aim to maximise statistical power through the use of as large a sample size as feasible, qualitative studies usually work with a small number of cases that are feasible to study in depth.

>> The setting, where sampling is carried out, is described in detail to provide thick description of the context, thereby, enabling the reader to make a transferability judgement.

>> Sample sizes for qualitative research vary by technique but are generally small.

>> Qualitative research involves non-probability sampling, where little attempt is made to generate a representative sample.

>> Participants are always sampled deliberately, not at random in qualitative research.

>> The sampling process in qualitative research is iterative and is expected to continue to develop and be refined during the research process.

iterative sampling approach whereby the research team moves back and forth (iterating) between sampling and analysing data such that preliminary analytical findings shape subsequent sampling choices.

>> Analysis and interpretation of data collected after initial sampling feeds back to influence sampling methods and decisions regarding sample size.

>> As the research progresses, and the sampling of additional data yields no further themes/ideas/concepts on analysis, the point of data 'saturation' is reached and sampling can cease.

>> You review the analysis, findings, and the quality of the participant quotes you have collected, and then decide whether sampling might be ended because of data saturation. In many cases, you will choose to carry out two or three more interviews or an additional focus group discussion to confirm that data saturation has been reached

Some practicalities

>> You do not have to interview everyone (in a community, hospital) to get a "good" sample.

>> a critical first step is to select settings and situations where you have access to potential participants.

>> Subsequently, the best strategy to apply is to recruit participants who can provide the richest information. Such participants have to be knowledgeable on the phenomenon and can articulate and reflect, and are motivated to communicate at length and in depth with you.

>> Finally, you should review the sampling plan regularly and adapt when necessary.

Types of sampling	Sampling	lethods
• Probability sampling means that every member of the population has a chance of being		
selected. It is mainly used in <mark>quantitative research</mark> .	THE REPORT OF	Non

• If you want to produce results that are representative of the whole population, probability sampling techniques are the most valid choice.

Probability Sampling Non Probability Sampling

• In a non-probability sample, individuals are selected based on non-random criteria, and not every individual has a chance of being included.

• Non-probability sampling techniques are often used in qualitative research. In these types of research, the aim is not to test a hypothesis about a broad population, but to develop an initial understanding of a small sample of population.

Approaches to sampling in Qualitative Research

>> Approaches to sample selection in qualitative research fall under two broad categories;

>> non-conceptually-driven approaches (convenience and opportunistic sampling).

>> conceptually-driven approaches (purposive and theoretical sampling).

Sampling strategies in qualitative research

Sampling	Definition
Purposive sampling	Selection of participants based on the researchers' judgement about what potential par- ticipants will be most informative.
Criterion sampling	Selection of participants who meet pre-determined criteria of importance.
Theoretical sampling	Selection of participants based on the emerging findings to ensure adequate representa tion of theoretical concepts.
Convenience sampling	Selection of participants who are easily available.
Snowball sampling	Selection of participants through referrals by previously selected participants or persons who have access to potential participants.
Maximum variation sampling	Selection of participants based on a wide range of variation in backgrounds.
Extreme case sampling	Purposeful selection of the most unusual cases.
Typical case sampling	Selection of the most typical or average participants.
Confirming and disconfirming sampling	Confirming and disconfirming cases sampling supports checking or challenging emergin trends or patterns in the data.

Convenience sampling

>> In this approach, the potential participants/research settings/ that are most easily accessible to the researcher are sampled.

>> "Because they are there": people closely surrounding you.

>> Its advantages are that it is less expensive and time- and effort-intensive.

>> Convenience samples are most appropriate when the priorities are speed and low cost.

>> Example, when you simply ask any patient in your clinic who is willing to participate.

Convenience sampling examples

>> a teacher who wanted to examine the perceptions of teachers about a policy change and decided to utilize a school within the district he or she worked in to recruit participants.

>> a professional who is a member of a professional organization and wanted to recruit participants through contact information available to members of that organization.

>> Both examples would be convenient to each researcher but would also require obtaining permissions to recruit participants (from the district and professional organization respectively).

Opportunistic (emergent) sampling

>> This sampling method involves the researcher taking advantage of circumstances that occur as the study progresses, taking up emerging opportunities for data collection along the way.

>> This flexible approach lends itself to exploratory field research where little is known about a phenomenon or research setting.

>> New opportunities to recruit participants or to gain access to a new site may develop after the fieldwork has begun.

>> As the observer gains more knowledge of a setting, he or she can make sampling decisions that take advantage of events, as they unfold.

>> Example

* Interviewing homeless people at a shelter, one man tells you where most of the homeless people sleep, so you add this site to where you interview.

Purposive sampling

- Purposive or judgement sampling is a frequently-applied conceptually-driven approach.
- It involves the researcher deliberately and purposefully selecting the sample they believe can be the most fruitful

in answering the research question.

• This selection process can be guided by consideration of the variables or qualities of potential participants that affect the contribution they could provide to the study.

• These variables may be simple demographics such as age, gender and socioeconomic status but can also

include other aspects such as specific attitudes or beliefs.

Example on purposive sampling

>> a student who seeks to look at current nurses' perceptions of leadership styles within a specific hospital setting.

>> This one sentence description alone can already generate two selection criteria: (a) must be an active nurse and (b) must work at a specific hospital setting.

>> Additional criteria such as number of years in the field or level of nursing

education will ensure participants have a similar foundation.

Strategies of purposeful sampling

* There are several different strategies for purposefully selecting information-rich cases.

>> Maximum variation sampling.	>> Homogenous sampling.	>> Deviant sampling.
>> Typical case sampling.	>> Critical case sampling.	>> Confirming and disconfirming sampling.
>> Stratified purposeful sampling.	>> Snowball sampling.	

Maximum variation sampling (Heterogenous sampling)

>> Entails the recruitment of study participants who vary widely on the dimensions of interest with the aim of identifying central themes/elements that hold true across the diverse sample.

>> Another definition; researchers access a wide range of data or participants who will represent wide variations of the phenomena under study.

>> This allows for multiple perspectives of individuals to be presented that exemplify the complexity of the world.

>> Any common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared aspects or impacts of a program

How does one maximize variation in a small sample?

>> One begins by identifying diverse characteristics or criteria for constructing the sample.

>> Suppose a state-wide program has project sites spread around the state, some in rural areas, some in urban areas, and some in suburban areas. The evaluation lacks sufficient resources to randomly select enough project sites to generalize across the state. The evaluator can at least be sure that the geographical variation among sites is represented in the study.

>> When selecting a small sample of great diversity, the data collection and analysis will yield two kinds of findings:

>> (1) high-quality, detailed descriptions of each case, which are useful for documenting uniqueness, and

>> (2) important shared patterns that cut across cases and derive their significance from having emerged out of heterogeneity.

Maximum variation sampling-Why use this strategy?

>> Often, researchers want to understand how a phenomenon is seen and understood among different people, in different settings and at different times.

>> When using a maximum variation sampling method the researcher selects a small number of units or cases that maximize the diversity relevant to the research question.

>> For example, this strategy was used by Foss and Edson (1989) in their study of women's choices about changing their names after marriage. The authors purposefully recruited three groups of women. Group one included women who adopted their husbands' names; in group two they kept their birth names; in group three they chose new names. Sample variation was necessary for illustrating the complex nature of post-marital naming decisions.

Homogenous sampling

>> In direct contrast to maximum variation sampling is the strategy of picking a small homogeneous sample.

>> aims to select a group of cases with similar backgrounds and experiences, simplifying analysis and facilitating group interviewing.

>> This sampling approach often is used to select focus groups.

Homogenous Sampling- Why use this method?

>> Homogeneous sampling is used when the goal of the research is to understand and describe a particular group in depth.

Deviant case (extreme instance) sampling

>> Involves the selection of extreme or outlying cases of the studied phenomenon, such as crises, exceptions or remarkable failures or successes, in an attempt to glean as much information relevant to the research question as possible from each case.

>> Learning from highly unusual manifestations of the phenomenon of interest.

>> For example, in a study of performance of graduate students, a researcher can select the best and the worse students in class and compare the causes of their performances.

>> For example, scholars interested in happiness may choose to interview people who are especially resilient, energetic, and long-living (Lyubomirsky, 2008), and those interested in crisis sensemaking may purposefully examine tragic disasters (Weick, 1993).

>> Excellent example of extreme group sampling is Angela Browne's (1987) study, When Battered Women Kill. She conducted in-depth studies of the most extreme cases of domestic violence to elucidate the phenomenon of battering and abuse. The extreme nature of the cases presented are what render them so powerful.

>> Finding (and even knowing what equates with) "extreme" requires first gathering and then sorting through a lot of "typical" data (The process of identifying extreme or deviant cases occurs after some portion of data collection and analysis has been completed).

Typical case (typical instance) sampling

>> focuses on typical/average cases with the aim of building up a profile of a typical case.

>> The case is specifically selected because it is not in any way atypical , extreme or deviant.

>> General agreement (consensus) on what constitutes a 'typical' case is required for this approach.

>> The researcher should consult several experts in the field of study in order to obtain a consensus as to what example(s) is typical of the phenomenon and should, therefore, be studied.

>> Another option is to use another sampling technique — like maximum variation sampling

- to identify typical cases prior to choosing cases for your study (Baran, 2016).

>> let's say you were studying violence in schools. The first step would be to list all of the criteria that define violence for a "typical" school.

>> Then you would choose schools that meet that criteria.

>> You would want to select schools that are "average" (meeting your selected criteria) instead of schools with very high or very low violence rates.

Typical case (typical instance) sampling- Why use this method?

>> Identifying typical cases can help a researcher identify and understand the key aspects of a phenomenon as they are manifest under ordinary circumstances.

>> Providing a case summary of a typical case can be helpful to those not familiar with a culture or social setting (Helps to give an overview to people with no background).

Critical case (critical incident sampling) sampling

>> selects cases that will produce critical information with maximum generalisability of information to other cases.

>> The process of selecting a small number of important cases - cases that are likely to "yield the most information and have the greatest impact on the development of knowledge" (Patton, 2001, p. 236).

>> A good critical case also permits logical deductions in the form: "If this is (not) valid for this case, then it is not valid for any (or only a few) cases" (Flyvbjerg, 2011, p. 307)

>> Given that the researcher correctly identifies what makes a 'critical case', knowledge gained may be applied to other cases.

>> Examples:

* if it happened to so and so then it can happen to anybody, or if so and so passed that exam, then anybody can pass.

* You want to know how well people understand a new tax law. Ask very educated people -- if they do not understand it, then probably no one will. Or ask a very uneducated population, if they understand it, most people will.

Critical case (critical incident sampling) sampling

* imagine you are a researcher studying the demise of traditional dinnertime rituals. You could purposefully choose a critical sample of families who might be most likely to practice traditional dinnertime rituals (e.g. religious, a stay-at-home mother). You might find that even these families do not engage in traditional rituals like saying a family prayer before dinner. In choosing this critical case, you might be able to play with the claim that, "if dinnertime rituals are fading even in this critical sample, then such rituals are likely disintegrating among most families."

* if conservative group adopts new technology, every other group will.

* Suppose national policymakers want to get local communities involved in making decisions about how their local program will be run, but they aren't sure that the communities will understand the complex regulations governing their involvement. The first critical case is to evaluate the regulations in a community of well-educated citizens. If they can't understand the regulations, then less-educated people are sure to find the regulations incomprehensible. Or, conversely, one might consider the critical case to be a community consisting of people with quite low levels of education: 'If they can understand the regulations, anyone can.' (Patton 2014: 276).

>> In short, choosing a critical sample can help with transferring claims to larger populations in the long run.

Critical case (critical incident sampling) sampling- Why use this method?

>> This is a good method to use when funds are limited. Although sampling for one or more critical cases may not yield findings that are broadly generalizable, they may allow researchers to develop logical generalizations from the rich evidence produced when studying a few cases in depth.

>> To identify critical cases, the research team needs to able to identify the dimensions that make a case critical.

Confirming and disconfirming sampling

>> Usually employed in later phases of data collection. Confirmatory cases are additional examples that fit already emergent patterns to add richness, depth and credibility. Disconfirming cases act as a means for placing boundaries around confirmed findings.

>> involves the selection of a mixture of cases that tie in with expectations or findings up to that point in the study and cases which deviate from them.

>> The confirming cases serve to add depth, detail and enhance credibility while the disconfirming cases challenge the prevalent narrative and may bring to light alternative interpretations.

>> This approach is generally utilised at later stages of a study when preliminary fieldwork has already established what qualifies as a 'confirming case'.

Stratified purposeful sampling

>> Selects participants from specific sub-groups of the population of interest, enabling easier comparison of the variation across sub-groups.

>> Patton (2001) describes these at samples within samples and suggests that purposeful samples can be stratified or nested by selecting particular units or cases that vary according to a key dimension.

>> The purpose of a stratified purposeful sample is to capture major variations rather than to identify a common core, although the latter may also emerge in the analysis.

>> Each of the strata would constitute a fairly homogeneous sample.

>> This strategy differs from stratified random sampling used in quantitative research in that the sample sizes are likely to be too small for generalization or statistical representativeness.

>> If you want to study university students, pick a certain number of students from each of the 4 years (sample of freshmen, sophomores, juniors, and seniors).

>> one may purposefully sample primary care practices and stratify this purposeful sample by practice size (small, medium and large) and practice setting (urban, suburban and rural).

Snowball sampling (FRIEND OF FRIEND)

>> Can also be called as chain sampling.

>> involves identification of participants by a technique known as 'snowballing' whereby initially identified participants are asked to suggest other possible candidates.

>> Researchers begin by identifying several participants who fit the study's criteria and then ask these people to suggest a colleague, a friend, or a family member.

Start with a few respondents and then ask them who else might have _____ or know about ____?

>> Find a few diabetic patients and then ask them who else they know that has diabetes.

>> This is especially useful when the studied population is hard to access, and/or may not publicly signal that they belong to the group of interest (e.g. drug-users).

>> One downside to snowball samples is that they can quickly skew to one type of group or demographic (as participants tend to suggest others who are similar to themselves).

>> A potential solution is to recruit a handful of participants who represent a maximum variation, and then to generate several smaller snowballs from that diverse initial sample.

Theoretical sampling

>> Theoretical sampling is an approach where sampling decisions are guided by the theory that starts to emerge from the collected data.

>> The process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them, in order to develop the theory as it emerges" (Glaser and Strauss, 1967)

>> The goal of sampling is to collect data that either further develops or challenges existent hypotheses. Initial cases selected have similar characteristics and are studied in depth. The researcher then samples outlying cases to see whether the developing hypothesis 'holds up' to these.

>> Once no new insights are derived from further data collection, sampling is ceased. This approach necessitates that data analysis and coding commence while data collection is still ongoing.

>> In theoretical sampling, the actual number of cases studied is relatively unimportant.

>> What is important is the potential of each case to aid the researcher in developing theoretical insights into the area of social life being studied.

>> After completing interviews with several informants, you consciously vary the type of people interviewed until you have uncovered a broad range of perspectives held by the people in whom you are interested.

>> You would have an idea that you had reached this point when interviews with additional people yield no genuinely new insights.

SELECTING INFORMANTS

>> Qualitative interviewing calls for a flexible research design.

>> The researcher starts out with a general idea of which people to interview and how to find them, but is willing to change course after the initial interviews.

>> Those new to qualitative research usually want to know exactly how many people they need to interview to complete a study. This is a difficult question to answer prior to conducting some research.

>> As Kvale (1996) pointed out: To the common question, "How many interview subjects do I need?" the answer is simply, "Interview as many subjects as necessary to find out what you need to know." (p. 101).

>> The size of the sample in an interviewing study is something that should be determined toward the end of the research and not at the beginning.

>> Although qualitative researchers generally cannot determine the sample size prior to conducting a study, people preparing proposals for dissertations or grants are usually expected to specify the number of informants or settings they intend to study.

>> IRBs might also require this. You should be prepared to indicate your sample size in proposals, adding that this might change as you start collecting and analysing data.

>> Informants can be found in a number of ways.

>> on pre-fieldwork, one of the easiest ways to build a pool of informants is snowballing—getting to know some informants and having them introduce you to others.

>> A potential drawback of the snowball technique is that it can limit the diversity of your informants (Cannon, Higginbotham, & Leung, 1988).

>> Therefore you need to be prepared to use a range of different approaches to identifying people.

>> You can locate potential informants through the same sources the participant observer uses to gain access to private settings: checking with friends, relatives, and personal contacts; involving yourself with the community of people you want to study; approaching organizations and agencies; advertising in media sources; and announcements through the Internet.

CONCLUSION- FLEXIBILITY IN QUALITATIVE SAMPLING

>> A flexible research and sampling design is an important feature of qualitative research.

>> When little is known about a phenomenon or setting, a priori sampling decisions can be difficult. In such circumstances, creating a research design that is flexible enough to foster reflection and preliminary analysis may be a good idea.

Sampling for qualitative research

- The aim of the qualitative research is to understand, from within, the subjective reality of the study participants.
- This will not be achieved through superficial knowledge about a large, representative sample of individuals.
- Rather we want to reach people within the study area who can share their unique slice of reality, so that all slices together illustrate the range of variation within the study area.

WEEK 11 Qualitative Research Proposal

Background and introduction

• Morse (2003:833) points out that qualitative methodology is used when little is known about a topic, the research context is poorly understood, the boundaries of a domain are ill defined, the phenomenon under investigation is not quantifiable, the nature of the problem is not clear, or the researcher suspects that the phenomenon needs to be re-examined.

• Researchers need a clear picture of the issues and questions that they want to investigate, as well as ideas of how they are going to go about investigating them, but always with an openness of mind to improvise, revise and adjust.

• Writing a proposal for a qualitative study is therefore a challenge, as the qualitative researcher "designs studies by conducting them - as opposed to conducting studies by design" (Sandelowski & Barroso, 2003:781).

• Quantitative researchers generally believe they know what they do not know (i.e. knowing the type of knowledge they expect to obtain by doing a study and then striving to obtain it).

• A qualitative researcher, by contrast, enters the study "not knowing what is known" (i.e. not knowing the phenomenon that will drive the inquiry forward).

• The qualitative proposal writer can therefore only anticipate how the study will proceed.

• Qualitative research begins by accepting that there is a range of different ways of making sense of the world (that the truth is only valid in a specific context) and is concerned with discovering the meanings seen by those who are being

researched and with understanding their view of the world rather than that of the researcher (Jones, 1995:2).

Process of the qualitative proposal

• Qualitative researchers often find themselves in a "catch-22" situation. They have intentionally selected a qualitative research design, as little is known about the phenomenon to be studied; yet it is expected to write how data analysis will be done when the data is not known.

However, it is imperative that the researcher must convince the proposal evaluation committee or funding agency reviewers in order to be allowed to proceed with the study.

• In response to this situation, Morse and Field (1996:35) remark that "clearly, developing a rigid plan for a qualitative project, including detailed plans for data collection and analysis, becomes impossible when writing qualitative proposals". Unlike positivist research, there is no single accepted framework for a qualitative research proposal.

• To present an acceptable proposal means shifting away from one's own concerns and thinking about the questions that the reader(s) or reviewer(s) of the research proposal will be asking (Silverman, 2000:113).

• These questions do not necessarily differ from the questions asked in quantitative research, but will alert one to the possible questions that will be asked.

• The questions a research proposal must answer, are: (i) Why should anyone be interested in my research? (ii) Is the research design credible, achievable and carefully explained - in other words, is it logical? (iii) Is the researcher capable

of doing the research? (Bottorff, 2002:7). Silverman (2000:113 -117) suggests that the researcher (whether qualitative or quantitative) answers these questions properly.

• This can be achieved by focusing on the following guidelines: be practical, be persuasive, make broader links, aim for crystal clarity and plan before you write.

<u>Be practical</u>

• Indicate to the members of the proposal evaluation committee or funding agency reviewers how your research will address the identified research problem or solve an issue, for example, staff morale or patients' perceptions

of quality of care.

<u>Be persuasive</u>

• Morse (1994:226) explains that "the first principle of grantsmanship (and for that matter approval of your proposal) is to recognize that a good proposal is an argument ... the proposal must take a case to the proposal evaluation committee or funding agency that the research question is interesting and that the study is important. Thus the proposal must be written persuasively."

• As a researcher you must be balanced, with a realistic understanding of what you can achieve (Silverman, 2000:114).

• To be persuasive implies that "you must convince other people, like other researchers, research funding agencies, educational institutions, and supervisors that your research is worth spending scarce resources on.

• You convince people of the value of your work by showing them how your research will make a difference to the world, or by identifying a dilemma in existing theory which your research will help resolve" (Higson-Smith, Parle, Lange & Tothill, 2000:5).

<u>Make broader links</u>

• The researcher should demonstrate in the proposal the understanding of the broader implications of the proposed research. (Silverman, 2000:114-115).

• Morse (1994:227) suggests that one way of achieving this is to "place the problem in context to show, for instance, that when we understand this, we will be able to work on that". For example, indicate how your research will improve practice or influence policy

Aim for crystal clarity

• The aim of the researcher should be for clearly stated, in simple language that describes the research in a way that non-specialists can comprehend.

• Morse (1994:227) argues that the researcher should resist the temptation to lapse into pure jargon, as "some of the reviewers will be from other disciplines, and the proposal writer should assume nothing and explain

everything".

• Silverman (2000:115) gives advice to the researcher and states that the proposal should be concise, using short, simple sentences

<u>Plan before you write</u>

• Remember the saying "If you fail to plan, you plan to fail."

• It is important that the writer plans the process, as the proposal should not only demonstrate that it is based on an intelligent understanding of the existing literature, but it must also show that the writer has thought about the time needed to conduct each stage of the research (Silverm an, 2000:116).

• Time management is embedded in the planning process.

• The proposal will also be judged on the researcher's account of how time will be used. Arber (1993:35) notes that one needs "to adopt a systematic and logical approach to research, the key to which is the planning and management of your time".

Structure of the qualitative proposal

 Cover page 	 Abstract 	• Introduction .	• Review of the Literature.			
Research proble	em and resear	ch questions.	• Resea	arch Objectives	i	Research Methods
• Ethical consider	ations.	• Dissemination pla	n.	• Timeline	• Budget	 Appendices

Cover page

- Formal documents usually have a cover page.
- The format of the cover page is often provided by the proposal evaluation committee or the funding agency.
- If no format is provided, create a cover page and include the following (Morse & Field, 1996:39-40):
- Title of the proposal.
- Name and affiliation of the researcher (principal investigator) and add coinvestigators (if relevant).
- The affiliation will include the type of degree, for example Master in Public Administration, as well as the

name of the university where the study will be conducted.

- Lines for the signatures of the researcher as well as the university authorities.
- Contact detail information address, phone and fax numbers, and e-mail address.

<u>Abstract</u>

• The abstract is a synopsis of the proposal; yet it is important that it is comprehensive enough to inform the evaluators or reviewers, and to introduce the project (Morse & Field, 1996:40).

• It should include a short introduction to the research problem, the research question, research purpose and objectives, followed by the research design and research method.

• The abstract is usually 250- 300 words long, but this is often dictated by the committee guidelines or the funding agency.

• First impressions count, and this is also true for the abstract, as this will be the first part that the reviewers read. It is advisable to leave the writing of the abstract until the end, as it will be easier to write after you have clarity of the research process.

• The inclusion of no more than five keywords is advisable at the end of the abstract.

• Structure can be given to the abstract by adding headings, i.e. Background, Aim (Purpose and specific objectives), Data Source, Method, followed by Keywords.

Introduction

• Begin with something interesting that immediately catches attention.

• Introduce the question and what it is that you want to know or understand, and explain the interest in the topic (Heath, 1997:1).

• The introduction must get the attention of the reader and convince him/her of the value of the study, or, as Sandelowski (2002:9) describes it, it must "set the stage".

• At the beginning of the proposal the significance of the study should be stated and it must be made clear why there is a need for the study (Sandelowski, 2002:9).

• Burns and Grove (2005:667-668) provide questions that can be used to assess the significance of the study: (i) Who has an interest in the domain of inquiry? (ii) What do we already know about the topic? (iii) What has not been answered adequately in previous research and practice? And (iv) How will this research add to knowledge, practice, and policy in this area?

• Furthermore, the introduction sets the scene and puts the research in context (Bumard, 2004:175).

Review of the literature

• Relevant literature should be cited that demonstrates the need for the research study in such a manner that it convinces the evaluators or reviewers that the study is worthwhile. "Literature consists of all written sources relevant to the topic you have selected" [or the phenomenon under investigation] (Bums & Grove, 2005:93).

• It is often a challenge to include all relevant or most supportive literature as data, knowledge and information availability expand daily in the digitally enhanced knowledge environment, doubling every eighteen months in 2008.

• It is therefore suggested that the researcher critique previous research, and demonstrates how the present study will clarify or compensate for shortcomings in previous research and how the study will add to the existing body of knowledge.

• The literature review provides a theoretical context for the study, but is not a conceptual framework, as it does not drive the study or provide an outline for the analysis (Morse & Field, 1996: 41).

• Apart from simply offering an account of the research that has been carried out previously, the author should describe how he or she searched the literature.

• This involves describing the computer search engines used and the keywords entered into those engines (Bumard. 2004:175). For example:

"Searches were performed using the following resources: Nexus database, South African journal".

• The literature review is not necessarily a separate heading, as it could be integrated in the introduction, providing a rationale for the planned study

Research problem (and research question)

• In this section the researcher answers the question: "What is the problem?"

• As research is a logical process, the research problem is a synthesis of the introduction and literature review;

in other words, it is a "diagnosis" of the problem. The problem can be broad, but must be specific enough to convince the reviewers that it is worth focusing on (Bottorff, 2002:11).

• The section on the research problem must conclude with the research question to be answered.

• Example: How is the primary health care policy implemented by different health professions? What happens to the system o f relations when the activity' takes place? Example: What happens to the quality o f care of patients from a low income status if they cannot access health care?

• In summary, the research questions clearly delineate the research (sometimes with sub-questions), and the scope of the research questions(s) needs to be manageable within the time frame and context of the study (Bottorff, 2002:11).

Research purpose and objectives

• The research purpose (or goal, or aim) gives a broad indication of what the researcher wishes to achieve in the research.

- The research purpose is a concise, clear statement of the specific goal of the study (Bums & Grove, 2005: 71).
- The purpose usually indicates the type of study to be conducted, i.e. identify, describe, explain, or predict.

Research purpose and objectives (example)

- "The aim of this research is to develop best practice guidelines for counselling for HIV testing during pregnancy.
- This aim is achieved by means of the following objectives:
- • To explore and describe the factors that influence pregnant women s decision to be tested for HIV in selected antenatal clinics in the North West Province;

• • To explore and describe the factors that influence the counselling for HIV testing during pregnancy according to counsellors who practice in selected antenatal clinics in the North West Province;

• • To describe the current practices regarding counselling for HIV testing during pregnancy in selected clinics in the North West Province; and

• • To describe the evidence regarding counselling for HIV testing during pregnancy by means of systematic review

Research method

• Research Method includes the steps of population and sample, data collection, ensuring rigor and data analysis

Population and sample

• "Population refers to all the elements (individuals, objects or substances) that meet certain criteria for inclusion in a given universe" (Bums & Grove, 2005:40).

• Describe the composition of the population (N) in your study. Explain how you will select participants and gain entry into the research context (if relevant) (Heath, 1997).

• Then continue with a description of the sample, and sampling technique.

• A sample is a subset of the population that is selected for a particular study. Name the sampling technique you will use and defend its use, for example motivate why you would use purposive sampling. State the inclusion and exclusion criteria, and lastly project the size of the sample (n).

• An example from a study by Mchunu and Gwele (2005: 33) is given: "The population consisted of community health centres, health professionals in these centres, and the surrounding communities, in the different community settings in the Ethekweni health district".

Data collection

• The researcher describes what he/she is aiming to find out and how the data will be collected.

• It is important that the researcher describes the kind of data that will be collected, e.g. examination of existing documents, field notes, audiotapes, focus groups, videos, internet-based data, etc); and how data will be collected e.g. interviews, discourse analysis, etc. The method must be described in detail.

• It is inadequate to simply refer to data that will be collected using "participant observation, field notes or diaries".

• A description with the justification of each method and how the method contributes to the understanding of the

phenomenon under study must be presented. If an interview guide will be used, include the questions in the proposal or attach as an appendix.

• Explain in detail how interviews will be conducted, i.e. include how focus groups will be conducted, inclusive of the role of the facilitator and moderator, and how responses to questions will be elicited (Sandelowski, 2002:17).

• An example from Morolong and Chabeli (2005:42) is given: "Observation and questioning were preferable data collection methods. For the main study, the researcher was assisted by an experienced expert clinical accompanist who was purposively selected for data collection. The researcher and the assistant used the developed instrument and its related manual, to evaluate the competence of newly qualified registered nurses "

Rigor (Soundness of the research)

• Rigor must be reflected throughout the proposal.

Data analysis

- Describe the intended data analysis procedure (coding, sorting, etc.).
- In explaining data reduction the researcher provides detail of write-ups of field notes, transcription procedures and the use of computer programmes (if planned).
- For the description of data analysis, relevant methods with citations must be included.

Ethical considerations

• Qualitative research introduces special moral and ethical problems that are not usually encountered by other

researchers during data collection; perhaps due to the unstructured conversational tone of interviews and the

intimate nature of the interaction between the researcher and participants (Morse & Field, 1996:44).

- It is therefore very important that the researcher take special care in ensuring that ethical standards are met.
- Ethical considerations refer to the protection of the participants' rights, obtaining informed consent and the

institutional review process (ethical approval).

- The researcher needs to provide adequate information on each of these aspects.
- Protection of participants' rights include the right to self-determination, right to privacy, right to autonomy and confidentiality, right to fair treatment and the right to protection from discomfort and harm.
- Informed consent needs to be obtained from the participants, as well as the research site and the relevant authorities

Dissemination plan

• The researcher should provide a condensed description of the plan that will be utilised to disseminate results, i.e. publication in peer-reviewed journals and paper or poster presentations at conferences.

<u>Timeline</u>

• The timeline is a schedule or work plan for the completion of the research (Morse&Field, 1996:42-43).

Gantt Chart						
Task Nama	Q12019			Q2 2019		Q3201
rask Name	Jan 19	Feb 19	Mar 19	Apr 19	Jun 19	Jul 19
Planning						
Research						
Design						
Implementation						
Follow up						

• The plan includes all the research activities to be completed, the predicted length of time that each activity will take to complete and when it will be performed.

• The plan can be described as text, but as several tasks may be conducted concurrently, it is often presented as a table or graph.

• A possibility is the use of the Gantt chart. A Gantt chart is a standard tool that can be used by the researcher to structure the timeline of the project, i.e. specific activities with target dates.

• Qualitative researchers are often very optimistic about the time to be allowed for the research activities, but the qualitative researcher can experience numerous delays, for instance; delays with interviews and the time-consuming process of qualitative data analysis.

• Morse and Field (1996:43) advise that the researcher should estimate how long each activity will take and then triple the time. Such leeway is important when funds are requested, to ensure that there is adequate funding for staff and for the completion of the project.

<u>Budget</u>

• A notion which interferes with the positive perception of qualitative inquiry is the idea that qualitative research is inexpensive to conduct (Morse, 2003:847).

• This is a myth. Qualitative research is not predictable; hence when the researcher prepares a research budget, he/she should predict and cost all aspects of the research, and then add an additional allowance for unpredictable disasters, delays and rising costs.

• Morse and Field (1996:43) refer to specific aspects that should be included in the budget: the number of participations cannot be predicted, because data will be collected until saturation, but an estimation must be included; recording of data (audiotapes, recorder, batteries, microphone); transcripts of interviews (on average, a fast typist will need three hours to transcribe a clearly recorded 45-minute interview); equipment; personnel budget (include

employee benefits); supplies (telephone, stationary); travel; cost of attending a conference for dissemination. All items in the budget should be justified.

Appendices

• Appendices are documents that support the proposal and application.

• The appendices will be specific for each proposal, but documents that are usually required include: informed consent form; verification of ethical approval; letters of approval from research site; letters of support (in case of funding application); curricula vitae of the researcher (principal investigator) and others members of the research team.



What is Mixed Methods Research (MMR)?

A Mixed methods research design is a research approach whereby researchers collect and analyse both quantitative and qualitative data within the same study to understand a research problem (Bowers et al., 2013).

• Johnson et al. (2007, p. 123) defined "mixed method research" as: "... the type of research in which a researcher

or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative

and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and

depth of understanding and corroboration."

• The key word is 'mixed', as an essential step in the mixed methods approach is data linkage or integration (Ivankova, Creswell, & Stick, 2006).

* The researcher mixes qualitative and quantitative data at the same time (concurrently) or one after the other (sequentially).

* The concept of mixing methods was first introduced by Jick(1979), as a means for seeking convergence across qualitative and quantitative methods within social science research (Creswell, 2003).

* This is beyond simply the inclusion of open-ended questions in a survey tool or the collection of demographic data from interview participants but rather involves the explicit integration of qualitative and quantitative elements in a single study (Halcomb, 2018).



Multi versus Mixed Methods

Multi Methods	Mixed methods
Uses more than one method	Uses both qualitative and quantitative
Can be two qualitative or two quantitative Mixed Methods	Involves mixing and integration of the data so that or type of data informs another

The Rise of MMR

• Mixed method research has a short history as an identifiable methodological movement which can be traced to the early 1980s and has been described as a 'quiet' revolution due to its focus of resolving tensions between the qualitative and quantitative methodological movements (Teddlie & Tashakkori, 2003)

Philosophy in mixed methods research

• Mixed methods research represents an opportunity to transform these tensions into new knowledge through a

dialectical discovery.

<u>* Dialectical pluralism is a process theory for dialoging across differences and producing dynamic integration of divergent perspectives and methods to produce a more complex and meaningful whole.</u>

•A pragmatic perspective draws on employing "what works," using diverse approaches, giving primacy to the importance of the research problem and question, and valuing both objective and subjective knowledge

MMR involves collecting both quantitative and qualitative data

Quantitative data
 Instruments
 Checklists
 Records

Qualitative data
 Interviews
 Observations

- Documents
- Audio-visual materials

Why Mixed Methods?

- Quantitative data can reveal generalizable information for a large group of people
 - These data often fail to provide specific answers, reasons, explanations or examples
- Qualitative research provides data about meaning and context regarding the people and

environments of study

• Findings are often not generalizable because of the small numbers & narrow range of participants



Both methods have strengths and weaknesses

• When used together, these methods can be complimentary

Why?

Provides a more complete picture of the research problem

"Reaching the parts other methods cannot reach" Pope C, and Mays N. (1995)

Qualitative versus quantitative research

Criteria	Qualitative research	Quantitative research	
Purpose	To understand and interpret social interactions	To test hypotheses, look at cause and effect and make predictions.	
Group studied	Smaller	Larger	
Variables	Study of the whole (not variables).	Specific variables studied.	
Form of data collected	Qualitative data, such as open ended responses, interviews, participant observation, and field notes.	Quantitative data based on precise measurement using structured and validated data collection instruments.	
Type of data analysis	Identify patterns, features and themes	Identify statistical relationships	
Results	Particular or specialised findings that are less generalizable.	Generalised findings that can be applied to other populations.	
Scientific method	Bottom- up- the researcher generates a new theory from the collected data.	Top- down- the researcher tests the theory with the data.	

When do you use mixed methods research?

• You have a sense that scores are not telling you the entire story. If you just asked a few people about the concept you might obtain a better understanding...mixed methods research provides a more complete understanding of the research problem than either quantitative or qualitative alone.

• Interpretation of data from one design only might be misleading, for example, a structured questionnaire about teachers' emotions regarding teaching practices may only show negative or positive emotion without adequately explain the event that triggered the emotions (Scott & Sutton, 2009).

Rationales for mixed methods research adopted from (Doyle, Brady, & Byrne, 2016)

Rationale Explanation

Rationale	Explanation
Triangulation (convergence)	Using quantitative and qualitative methods so that findings may be mutually corroborated (Quantitative analyses employ descriptive and inferential statistics, whereas qualitative analyses produce expressive data that provide descriptive details (often in narrative form) to examine the study's research objectives)
Explanation	 The first phase has findings that require explanation qualitatively (to explain results or how mechanisms work) in causation models. Unexpected findings that need to be explained
Exploration	An initial phase is required to develop an instrument, identify variables to study or develop a hypothesis that requires testing (Explore qualitatively then develop an instrument)
Complementarity	Using different methods to address different parts of the phenomenon. to integrate two different but connected answers to a research question: one reached via a quantitative approach and the other by means of a qualitative one.
Offset weaknesses (compensation)	Ensures that weaknesses of each method are minimised.

<u>Planning of MMR</u>

• Four questions must be addressed by the researcher during the planning stage of mixed methods research:

- 1. In what sequence will the qualitative and quantitative data collection be implemented?
- 2. What relative priority will be given to the qualitative and quantitative data collection and analysis?
- 3. At what stage of the project will the qualitative and quantitative data be integrated?
- 4. Will an overall theoretical perspective be used to guide the study?
- Priority in mixed methods design is the relative weight assigned to the qualitative and quantitative research components.
- Sometimes priority is referred to as dominance. Notations of MMR
- The use of upper case refers to emphasis (i.e. the primary or dominant method), whereas the use of lower case refers to lower emphasis, priority or dominance (Morse, 1991).

>QUAN or quan refers to quantitative data.

>QUAL or qual refers to qualitative data.

>MM refers to mixed-methods.

 \rightarrow data collected sequentially.

> + data collected simultaneously.

>= converged data collection.

>() one method embedded in the other.

Mixed methods designs (According to the order or timing of implementation of the data collection)

•Sequential Explanatory Design

•Sequential Exploratory Design

•Sequential Transformative Design

• Concurrent Triangulation Design

• Concurrent Embedded/Nested Design

Cuincuia

• Concurrent Transformative Design

(Creswell & Creswell, 2003)

Criteria						
Timing	Designs	Weighting	Mixing/ stage of integration	e n Notation	Theoretical perspective	Description
Sequential	Explanatory	Usually quantitative	Interpretation phase	QUAN→qual	May be	The researcher seeks to
	Exploratory	Usually qualitative	Interpretation phase	QUAL→quan	present	elaborate on or expand the
	Transformative	Qualitative, quantitative or equal	Interpretation phase	qual→quan or quan→qual	Use of theoretical perspective (e.g. advocacy)	findings of one method with another method
Concurrent	Triangulation	Preferably equal; can be quant or qual	Interpretation or analysis phase	QUAN + QUAL	May be	The researcher converges two types of data at
	Embedded	Qualitative or quantitative	Analysis phase	QUAN(qual) or QUAL(quan)	present	same time to provide an
	Transformative	Qualitative, quantitative or equal	Usually analysis phase, can be interpretation phase too	qual + quan or quan + qual	Use of theoretical perspective (e.g. advocacy)	inclusive analysis of the research

SEQUENTIAL EXPLANATORY DESIGN

('QUAN \rightarrow qual')

QUAN Data & Results Following up

• Alternatively, we can refer to it as explanatory design.

• The most frequently applied mixed methods design in both health and social sciences literature (Ivankova,

Creswell, & Stick, 2006).

• The reason for favouring sequential explanatory design is that quantitative design in the first stage will portray the

objective statistical findings from the group in general. Afterwards, a qualitative approach can be used to discover subjective nuances from participants as individuals and explain the phenomenon behind the numbers that cannot be described merely by the quantitative data (Fries, 2009).

- Viewing the study as a wo-phase project.
- It is denoted by 'QUAN \rightarrow qual' which represents the quantitative study occurs first and has greater weight in

addressing the study's aims, and the qualitative study follows to explain quantitative results. Sequential explanatory design

• Used when you want to explain the initial quantitative results in more depth with qualitative data (e.g. statistical differences among groups).

• The rationale for this approach is that the quantitative data and their subsequent analysis provide a general understanding of the research problem. The qualitative data and their analysis refine and explain those

statistical results by exploring participants' views in more depth.

- This design can be especially useful when unexpected results arise from a quantitative study.
- Data analysis is usually connected, and integration usually occurs at the data interpretation stage.

• To reiterate, key characteristics:

>Data collection priority (Quantitative data).

>Sequence (First quantitative data then qual).

- >Use of data (to refine, elaborate).
- Questions to consider when collecting the qualitative data:
- >What results need further explanation?

>What qualitative questions arose from the quantitative results?

• Interview schedule questions depend on and are developed based on the quantitative findings (Liem, 2018).

• In explanatory research where qualitative research is mostly used to substantiate findings generated in a population-level survey, priority is mostly assigned to the quantitative component.

Example on Sequential Explanatory Study

• Researchers may ask persons with hearing loss to rate their conversational abilities before and after an aural rehabilitation program (QUAN) and then have the same participants take part in one-on-one clinician-led follow-up

interviews to discuss reasons for specific ratings (qual).

Another example on Sequential Explanatory Design

• A study aimed to : 1) to identify the proportion of individuals with cerebral palsy, spinal cord injury, multiple sclerosis, or arthritis who report difficulties with accessing and/or utilising needed health care services; 2) to identify reasons for

access or utilisation difficulties and the consequences that these may produce.

• The quantitative component involved a survey that identified a group of 'access_stressed' individuals who reported substantial problems in accessing and/or using health care services.

• The qualitative study component focused on this group to examine what specific barriers made access problematic and what consequences resulted from not receiving care when needed (Neri & Kroll, 2003).

Collaboration amongst clinical nursing leadership teams: a mixed-methods sequential explanatory study

Design

An explanatory sequential mixed-methods design was used (Creswell & Plano Clark 2011), in two phases. Phase One entailed collection of quantitative data, with Phase Two collecting qualitative data for the purpose of explaining initial findings in greater depth (Creswell & Plano Clark 2011).

The extent of collaboration between these NLTs was measured using the Collaborative Behaviour Scale (CBS) (Stichler 1990). The CBS was developed to measure respondents' perceptions of collaborative behaviours in relationships between health care professionals. Collaborative behaviours were sought between: NUM–NE; NUM–CNC and NE–CNC, all vice versa. Demographic information identified age, gender, length of experience, specialty work area, highest educational attainment and any postgraduate leadership courses/workshops/learning activities completed.

Data analysis

Descriptive analyses of the quantitative data were performed using the Statistical Package for the Social Sciences (SPSSTM version 19.0; Chicago, IL, USA). Means, minimum and maximum, and frequency scores were used to describe demographic characteristics, with Fischer's exact tests being used to seek differences between groups. Total scores were calculated by adding the scores for the 20 individual items on the CBS (Stichler 1990). The CBS score median and interquartile ranges were calculated for each group. Non-parametric tests were used to compare the total CBS scores of participants.

Thematic analysis of focus group transcripts used the approach of Braun and Clarke (2008). This process involved: (1) familiarisation with the data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report.

Data collection

Collaborative behaviours were measured in Phase One using questionnaires mailed to all eligible participants between May and June 2012 via the hospital internal mail system; participants were asked to return them anonymously. To further explore and explain the collaborative behaviour findings, Phase Two employed focus group meetings conducted in April and May 2013, to follow up on initial findings.

Focus groups

Following Phase One quantitative data collection, all NUMs, NEs and CNCs were invited by e-mail to participate in focus groups relating to the Phase One findings. Two focus groups were conducted post-analysis to further explore and explain the quantitative survey findings. Both focus groups involved participants from each of the NLT professional groups and allocation was agreed in relation to availability on specific dates.

Example of Sequential Explanatory mixed methods design protocol

UNDERSTANDING THE FACTORS THAT INFLUENCE CLINICAL DECISION-MAKING - A SEQUENTIAL EXPLANATORY MIXED METHODS STUDY PROTOCOL

Veena Manja, Sandra Monteiro, Gordon Guyatt, John You, Satyan Lakshminrusimha, Susan Jack

ABSTRACT

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Background: Despite soaring healthcare costs, patient outcomes are suboptimal in the USA. Efforts to limit healthcare costs and improve quality of care have had limited success. An improved understanding of factors that influence clinical decision-making may provide insight into optimizing the quality and costs of care. The process of healthcare decision-making is contextual, complex and poorly understood. This study aims to explore the factors that influence clinical decision-making in the setting of limited evidence of effectiveness, limited or conflicting guidance, significant resource burden and variation in values and preferences.

Rationale for study design: This sequential explanatory mixed methods study includes a case-based survey (quantitative phase). The results of the survey will guide the sampling and questions for the semistructured interviews (qualitative phase). The interviews will provide an in-depth explanation of the survey results. Combining the two methods provides complementary information and deeper understanding of the phenomenon of clinical decision-making.

Methods: The quantitative strand will consist of case-based surveys in the fields of neonatology and cardiology. Participants are asked to pick the best management choice for each question followed by a rating of the influence of different factors on a 7-point Likert scale. Follow-up questions explore knowledge and influence of evidence, guideline recommendations and costs on decision-making. Analysis of the survey results will inform sampling and the focus of qualitative interviews. The interviews will be analyzed using qualitative description.

Discussion: To our knowledge, this is the first study using a mixed methods approach including a case-based survey of physicians practicing in diverse settings to explore the factors that influence clinical decisionmaking. The results of this study may assist with strategies to implement high value care resulting in improved patient outcomes and limiting costs.

Drawbacks of Sequential Explanatory Design

It is more time-consuming when compared to concurrent designs (Ivankova, Creswell, & Stick, 2006).

- Potential for loss of participants.
- Can be difficult to fully plan the qualitative arm since it will be dependent on the results of the quantitative results.

WEEK 13 : MIXED METHODS RESEARCH_2

Data integration in MMR

- John Creswell (2015, p. 83) identifies four types of integration:
- 1. Merging the data: The quantitative and qualitative results are brought together and compared.
- 2. Explaining the data: The qualitative data are used to explain the results of the quantitative data.
- 3. Building the data: The qualitative findings are used to build the quantitative phase of the study.
- 4. Embedding the data: One set of data is used to augment or support the other set of data



Figure 3. Exploratory sequential design. Source: Adapted from Figure 3.2(c): Creswell and Plano Clark (2011: 69).



<u>Sequential Exploratory Design ('QUAL \rightarrow quan')</u>

• Alternatively, we can refer to it as exploratory design.

- Viewing the study as a two phase project.
- Used often to explore a phenomenon, identify themes, and or design an instrument.
- In an exploratory design, qualitative data is first collected and analyzed, and themes are used to drive the development of a quantitative instrument to further explore the research problem (Teddlie & Tashakkori, 2009).
- Typically, greater emphasis is placed on the qualitative data in the study.
- Data analysis is usually connected, and integration usually occurs at the data interpretation stage

Sequential Exploratory Design

• In exploratory studies, where the concepts, variables and relationships among them are mostly unclear, greater priority is often assigned to qualitative elements that uncover the 'pool' of variables and relationships among them that may be subsequently studied quantitatively

Sequential Exploratory Design- Data collection

• In this strategy, the data collection would occur in two phases with the initial qualitative data collection followed by the second quantitative data collection. The challenge is how to use the information from the initial phase in the second phase.

• The qualitative data analysis can be used to develop an instrument with good psychometric properties (i.e., validity, reliability).

• The qualitative data analysis will yield quotes, codes, and themes.

• The development of an instrument can proceed by using the quotes to write items for an instrument, the codes to develop variables that group the items, and themes that that group the codes into scales.

• A researcher can analyse the qualitative data to develop new variables, that will be explored further in a quantitative phase.

• The question arises if the sample for the qualitative phase is the same for the quantitative phase. This cannot be, because the qualitative sample is typically much smaller than a quantitative sample needed to generalize from a sample to a population. Sometimes mixed methods researchers will use entirely different samples for the qualitative and quantitative components of the study.

Sequential Exploratory Design- Data Analysis

• In this strategy the researcher analyses the two databases separately and uses the findings from the initial exploratory database to build into quantitative measures.

Sequential Exploratory Design- Interpretation

• Researchers interpret the mixed methods results in a discussion section of a study.

• The order of interpretation is to first report the qualitative findings, the use of the qualitative results (e.g., the development of an instrument). and then the quantitative results of the final phase of the study.

An example on Sequential Exploratory Design

• A researcher may conduct a focus group of special education teachers to generate discussion of perceived barriers to

implementing speech and language services in the schools (QUAL). Then, using the ideas generated in the focus group, a large-scale survey might be sent to all the teachers in a district asking them to rate the impact of predetermined barriers (quan).

Another example on Sequential Exploratory Study

• A study sought to: 1) understand the motivating and inhibiting factors to physical activity and exercise in people after spinal cord injury (SCI), and 2) develop, test and implement a survey tool that examines self reported physical activity after SCI and its relationship with secondary conditions.

• Qualitative (exploratory) data collection preceded the quantitative study component

• The focus groups specifically explored barriers and facilitators of exercise. Understanding these factors was critical to inform development of the survey tool, which included items on 'chronic and secondary conditions', 'health risk

behaviours', 'hospital and health care utilisation', 'physical functioning', 'exercise activities and patterns', 'rehabilitative therapy', 'wheelchair use', 'community integration' (Neri, Kroll, & Groah, 2005).

Another example on Sequential Exploratory Study

 Stoller et al. (2009) conducted a sequential exploratory study to explore factors that affect the decision to curtail alcohol consumption in those with hepatitis C, a previously under-researched topic.

• Interviews were conducted with 42 participants with hepatitis C who had been advised to curtail alcohol. From these interviews, 17 decision factors were identified which then fed into the development of a survey measuring these 17 new factors.

• This survey was then administered to 577 people with hepatitis C, thereby testing these new factors in a larger sample and providing prevalence estimates.

Perceived challenges of nurse educators while teaching undergraduate nursing students in Pakistan: An exploratory mixed-methods study

Objectives

To explore nurse educators' perspectives about their clinical and academic teaching, to develop a questionnaire to determine educators' challenges, and to develop a comprehensive understanding of educators' challenges.

Design

A sequential exploratory mixed-methods study.

4. Methods

4.1. Design

An exploratory sequential design, comprising three phases, was used as it allows exploration of a phenomenon from participants' perspective and to develop an instrument that "based on the culture and setting of the research participants rather than pulled off the shelf for use" (Creswell and Plano-Clark, 2018, p. 84). The initial qualitative phase was used because: a) no instruments existed to determine educators' challenges, therefore the qualitative findings informed questionnaire development and b) teaching challenges are contextual and are influenced by the nature and structure of nursing institutions, hence the qualitative phase helped to capture these contextual challenges.

4.3. Instruments

The qualitative interview guide was developed based on the WHO competencies Table 1). The primary questions asked participants to describe any challenges in meeting each competency. Acknowledging that some of the participants may not be knowledgeable about these competencies two questions explored their roles and responsibilities as educators.

4.4. Data collection

The data collection took place from January–February 2018 (qualitative phase I), April–May 2018 (pilot phase II), and July–December 2018 (phase III). For the qualitative phase I, the researchers invited educators to participate in the study through the management of the institutions. The interviews were conducted at the time and place that the participants deemed convenient. The researchers gave written information outlining the purpose and estimated timing of the interview, its recording and transcription, and sharing of the data with the team. The participants were encouraged to ask any questions before, during, and after the interview and were reminded of the right to stop the interview anytime. During the interviews, prompts were used to develop in-depth understanding of the challenges. The interviews were initiated with an overarching question and lasted for 20-25 min.

4.2. Sample and setting

The study was conducted in 12 public and private nursing institutions in five cities: Rawalpindi, Islamabad, Lahore, Swat, and Peshawar. The target population (N=180) comprised all <u>nurse educators</u> involved in clinical and classroom teaching. For the qualitative phase, a purposive sample of 12 educators were recruited to ensure greater representation from different subgroups (age, gender, and education level) and five cities. The developed questionnaire was pilot tested with 15 educators from all institutions. The recommended pilot sample is at least 15-30 (Grove et al., 2017). For quantitative surveys, 112 educators from all institutions participated following an open invitation. The sample size calculation was not feasible because of a small population.

Table 1. Qualitative interview guide.

I would like to thank you for agre ut self-awareness and its importan using practice. First of all, please describe yo ur role as a nurse educator?

- se describe yo
- Please describe the challenges that prevent you from fulfilling these resp
- nges that you encounter while applying your the in teaching nursing students.
- Please describe any challe n teaching students
- 5. Please describe any challenges that you encounter while teaching nursir se describe any challenges that you encounter while c
- your ability to teach nursing and to share that research with the nursing com ent you from co nicating and collab
- Please describe any challenges that may prevent you from health care teams and developing a partnership for enha

For the phase II quantitative study, five experienced nurse educators were contacted through email and their responses were sought to evaluate the face and content validity of the developed questionnaire. They were provided with a content validity questionnaire entailing detailed information of the study population and setting, the scale items, categories, a 4-point Likert Scale (1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, and 4 = highly relevant), and two open ended questions: i) Please comment on any of the items which can be revised and rephrased and ii) Please share your views about why any of the items were rated as not relevant. The purpose of this content validity exercise was to judge the relevance, comprehensiveness, and balance of the scale items (Polit and Yang, 2016). After this exercise, some of the participants from the qualitative phase were invited to assess the readability and clarity of the items to their setting. A linguist and a lapperson further assessed the readability because having a neutral perspective can provide more insights concerning the used language. The final judgement of the items was made by the team.

4.5. Data analysis

Thematic analysis was used for qualitative analysis: a) data familiarization and transcription which involves coding at different levels, of theme search which involves coding at different levels, of theme search which involves developing thematic maps, e) themes search which involves developing thematic maps, e) themes sedefining and naming, and f) theme finalization. Prior to coding, participants' transcripts were read several times to develop a comprehensive understanding of their responses. In this stage, to ensure credibility, the researchers set aside personal thoughts, ideas, and feelings that may prevent them from gaining a thorough understanding of the responses. Data coding were completed at three levels: line by line reading of the individual transcripts and identifying the key messages of each line (level I coding), reading and analyzing level I codes across transcripts and analyzing for similarities, differences, and patterns and then condensing level I used in the coding (level II coding), and codes (level II coding), and condensing level II codes into broad codes (level II coding), and condensing level II codes into broad codes (level II coding).

For phase III, the quantitative study, a convenient sample was used. An invitation was sent to the nursing institutions through the institutional heads and the educators who agreed to participate contacted the researchers through phone or email. The researchers provided detailed study information to the participants along with a paper based or an electronic questionnaire.

Regarding mixed method analysis, building and merging integration techniques were used. Building is an integration approach when one dataset informs the data collection approach for the subsequent phase (Fetters et al., 2013). This approach was used in the qualitative phase and the pilot phases in order to develop the survey. Merging refers to the integration of qualitative and quantitative data at the data analysis level (Fetters et al., 2013). This approach was used at the end of the survey when the interviews and the final survey results were compared. The qualitative

Sequential Transformative Design

- Has two distinct data collection phases.
- Both types of methods are combined in this design, but the research is also explicitly driven by a transformative theoretical perspective.
- In this method either type of data can be collected first
- A theoretical perspective (lens) is used to guide the study (transformative framework).
- Purpose is to use the methods that will best serve the theoretical perspective of the researcher.
- After separate analysis of qualitative and quantitative data, integration of outcomes will take place during the

interpretation phase (Alavi & Hąbek, 2016).

 The researcher uses a theoretical based framework to advance needs of underrepresented or marginalised population (women, people with disabilities, racial and ethnic minorities, religious minorities).

- Seeks to address issues of social justice and call for change.
- Strength: very straight-forward in terms of implementation and reporting.
- Weakness: time consuming. Little guidance due to the relative lack of literature on the transformative nature of moving from the first phase of data collection to the second.

Sequential transformative design

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-	QUAN 📂 qual

An example of Sequential Transformative design

- A sequential transformative study was conducted to examine the cultural influences on mental health problems.
- The study commenced with a quantitative telephone survey of the community

which included the General Health Questionnaire.

• The quantitative phase of the study was followed by qualitative interviews which were theoretically driven. These interviews enabled the researchers to explore the cultural health experiences related to the non-use of mental health facilities by Vietnamese and West Indian participants living in an urban area of Montreal.

Concurrent Triangulation Design

- In this case, the qualitative and quantitative data are collected simultaneously.
- Priority is usually equal and given to both forms of data.
- The results are then integrated in the final interpretation.
- Merging of QUAN and QUAL results occurs during the analysis and interpretation to provide an integrated conclusion and involves comparing, contrasting and synthesising the two strands. (Creswell, Klassen, Plano Clark, & Smith, 2011)
- Used when the researcher wants to validate quantitative findings with qualitative data.
- Particularly useful for decreasing the implementation time.
- "Parallel" term can be used to define the concurrent approach (Bryman, 2006).>>>>Parallel triangulation design

Concurrent triangulation design

- Data collection priority (equal).
- Sequence (concurrently)
- Use of data (To compare similar/dissimilar).

An example on Concurrent

Triangulation Design

• In their study of maternal and child well-being conducted semi structured in-depth interviews with mothers and collected quantitative data using several validated scales (e.g. Parenting Stress Index, Edinburgh Post-Natal Depression Scale (EPDS), Rosenberg Self-Esteem Scale) at the same home visit.

• The authors identified numerous family stressors in interviews, which were corroborated in the quantitative maternal stress index scales. Similarly, the objective measures (EPDS) addressing emotional well-being that indicated a high level of maternal depression were supported by findings from the interviews, in which mothers reported

low energy levels, despondency and anxiety attacks.



Concurrent triangulation design

 The authors note that concurrent use of qualitative and quantitative measures adds to the depth and scope of finding (McAuley, McCurry, Knapp, Beecham, & Sleed, 2006).

Determinants and mitigating factors of the brain drain among Egyptian nurses: a mixed methods study

Methods: Mixed-methods research was conducted using a concurrent triangulation design. A sample of 325 nurses who were working at an Egyptian university hospital answered a brain drain questionnaire while the qualitative investigation was guided by a semi-structured interview with a purposive sample of 35 nurses to elicit exploratory perspectives on factors causing brain drain and mitigation strategies. Results were analysed using inferential statistics and thematic data analysis.

Methods

Research setting and design

Research setting and design This study was conducted at the Main University Hospital, which is a large university hospital in Alexandria City, Egypt. A mixed-methods research design using 'concurrent triangulation' was conducted in this study, in which both quantitative and qualitative data were simultaneously collected to determine convergences, differences and phenomena, and more precisely establish relationships among variables of interest (Cresswell et al., 2003; Sharon and Halcomb, 2009). A quantitative study was carried out with a cross-sectional design while the qualitative investigation was guided by semi-structured interviews to elicit more insight of nurses' personal experiences and these. The findings from the qualitative descriptive part may be of special relevance to practitioners and leaders in developing strategies to address workplace issues that increase nurses' retention. nurses' retention.

Study participants

The total population of nurses working at the above-mentioned hospital is 600 nurse All

The total population of nurses working at the above-mentioned hospital is 600 nurses. All nurses with experience of one year and more were eligible for the study as an inclusion criterion (n = 480). Exclusion criteria included any nurse who had less than 1 year of experience or was unwilling to participate in the study. The sample size was determined using the Raosoft sample size calculator using the following parameters: population size 480, margin error of 5, confidence interval 95%, and significance level of $p \le 0.05$. Thus, the minimum recommended sample size was 214. To ensure that we obtained the recommended sample, 480 questionnaires were distributed to the nurses. Out of them, 325 nurses returned the study questionnaire. For the qualitative part, 35 nurses were interviewed based on purposive sampling until data saturation was reached (the point where no new information emerges from the study participants). Participated in the quantitative phase also constituted the purposive sample for the invises who participate at the time of data collection. Participants were chosen to include different working units, current position and educational levels to capture a range of perspectives. perspectives.

Concurrent Embedded/Nested Design

• Quantitative and gualitative data are collected and analysed at the same time. However, priority is usually unequal and

given to one of the two forms of data-either quantitative or qualitative data.

• In this case, both types of data are collected simultaneously, but one of the two methods is embedded in the other in a way that

allows the researcher to address a question that is different from the one answered by the dominant method.

• The integration of data occurs in the analysis.



Concurrent Embedded/Nested Design

• Primarily purpose is for gaining a broader perspective than could be gained from using only the predominant data collection method.

• Secondary purpose is use of embedded method to address different research questions.

An example of Concurrent Nested/Embedded Design

• Strasser et al. (2007) conducted a concurrent nested design to explore eating_related distress of advanced male cancer patients and their female partners.

• The primary method used in the study was focus groups which were attended by patients and their partners with the conduct of these groups and the analysis of the data based on grounded theory (qualitative) techniques.

• The secondary or nested focus of the study was the differences in patients' and

their partners' assessment of the intensity and symptoms and degree of cachexia_related symptoms of eating-related disorders of patients. This secondary information was collected by a structured questionnaire which was completed at

the time of the first focus group.

• The eating-related distress differed for patients and their partners as indicated in the qualitative findings, and this was complemented by the quantitative findings. (Strasser, Binswanger, Cerny, & Kesselring, 2007).

Concurrent /Transformative Design

• Guided by a theoretical perspective of change.

• Concurrent collection of both quantitative and qualitative data.

• Similar to sequential transformative designs, these designs are useful for giving voice to diverse or alternative

perspectives, advocating for research participants, and better understanding a phenomenon that may be changing as a result of being studied.

• Aims to address social issues faced by the group of people.

Table 10.3 Choosing a Mixed Methods Project, Expected Outcomes, Type of Design

Reasons for Choosing Mixed Methods	Expected Outcomes	Recommended Mixed Methods Design
Comparing different perspectives drawn from quantitative and qualitative data	Merging the two databases to show how the data convergent or diverge	Convergent parallel mixed methods design
Explaining quantitative results with qualitative	A more in-depth understanding of the quantitative	Explanatory sequential
data	results (often cultural relevance)	mixed methods design
Developing better measurement instruments	A test of better measures for a sample of a population	Exploratory sequential mixed methods design
Understanding experimental results by incorporating perspectives of individuals	An understanding of participant views within the context of an experimental intervention	Embedded mixed methods design
Developing an understanding of needed changes for a marginalized group	A call for action	Transformative mixed methods design



Concurrent transformative design

Research Questions in MMR

• Think about order of data collection:

>If sequential, ask first question first, second second.

>If concurrent, ask questions based on weight or importance- if quan more heavily weighted , start with quan research hypothesis, if qual more heavily weighted, start with qual research questions.

Data analysis in mixed methods

- It is unusual for qualitative and quantitative data to be analysed together.
- Typically, we use analytic methods appropriate to our data collection strategy
- Each of our analyses must, therefore, meet standards of rigor specific to the overall approach
- The key is actually how we:
- *Use each form of analysis
- -*Integrate our INTERPRETATION of our analyses

Advantages of MMR

- •Compares quantitative and qualitative data.
- •Reflects participants' point of view.
- Fosters scholarly interaction.
- •Collects rich, comprehensive data.
- Words, pictures, and narrative can be used to add meaning to numbers.
- Numbers can be used to add precision to words, pictures and narrative.

(Migiro & Magangi, 2011)

Weaknesses of MMR

- A researcher has to learn about multiple methods and approaches and understand how to mix them appropriately.
- Mixed method research can be difficult for a single researcher to carry out, especially if the two approaches are expected to be used concurrently.
- Mixed method research is more expensive and more time consuming.
- Little guidance on transformative methods in the literature.

(Migiro & Magangi, 2011)